

PV-SET 1000 DC/AC

Order No.: 2804458



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2804458>

Surge protection in IP65 housing for the AC and DC sides of an inverter for single string photovoltaic systems up to 1000 V DC.

Commercial data

EAN	4046356317849
Pack	1 pcs.
Customs tariff	85363030
Weight/Piece	1.575 KG
Catalog page information	Page 59 (TT-2009)

Technical data

Standards

Housing material	Polycarbonate fiber reinforced
Inflammability class acc. to UL 94	V2
Color	Light gray RAL 7035

Standards for air and creepage distances	IEC 61643-1
	IEC 60664-1: 1992-10
	DIN EN 61643-11
Degree of protection	IP65
Mounting type	Surface/Wall mounting
Design	Installation housing
Number of positions	2
Ambient temperature (operation)	-25 °C ... 70 °C
Message surge protection faulty	Optical, remote indicator contact
Direction of action	DC: (L+)-PE & (L-)-PE & (L+)-(L-) / AC: L-N & N-PE
Width	200.00 mm
Height	122.00 mm
Length	200.00 mm

Protective circuit

IEC category	II
EN type	T2
Nominal voltage U_N	230 V AC (U_N)
	1000 V DC (Non-load voltage U_{oc})
Arrester rated voltage U_c	1000 V DC
Arrester rated voltage U_c (L-N)	335 V AC
Arrester rated voltage U_c (N-PE)	260 V AC
Nominal frequency f_N	50 Hz (60 Hz)
Rated load current	≤ 80 A DC
	≤ 80 A AC
Discharge current to PE at U_c	≤ 20 μ A (10 μ A-AC)
Max. discharge surge current I_{max} (8/20) μ s	30 kA (DC)
	40 kA (AC)
Nominal discharge surge current I_n (8/20) μ s	15 kA (DC)
	20 kA (AC)
Protection level U_p	≤ 5 kV (for V wiring (DC side))
Protection level U_p (L-N)	≤ 1.5 kV (For I_n (AC side))
Protection level U_p (N-PE)	≤ 1.2 kV (For I_n (AC side))
Residual voltage	≤ 5 kV
	≤ 4.5 kV (at 10 kA)
	≤ 4 kV (at 5 kA)

Residual voltage (L-N)	≤ 1.1 kV (at 5 kA)
Residual voltage (N-PE)	≤ 1 kV (at 5 kA)
Response time	≤ 25 ns (DC side)
Response time (L-N)	≤ 25 ns
Response time (N-PE)	≤ 100 ns
Max. required backup fuse with branch wiring	≤ 125 A (gL/gG (AC side))
Short circuit resistance I_{cc} with max. backup fuse (effective)	25 kA (AC side)

Connection, protective circuit

Type of connection	Screw terminal blocks
Connection type IN	Biconnect screw terminal block
Connection type OUT	Biconnect screw terminal block
Connection method	Biconnect terminal block
Screw thread	M5
Tightening torque, min	4.5 Nm
Stripping length	16 mm
Conductor cross section stranded min.	1.5 mm ²
Conductor cross section stranded max.	25 mm ²
Conductor cross section solid min.	1.5 mm ²
Conductor cross section solid max.	35 mm ²
Conductor cross section AWG/kcmil min.	15
Conductor cross section AWG/kcmil max	2

Remote indicator contact

Connection name	Remote indicator contact
Schaltfunktion_Int	PDT, 1-pos.
Type of connection	MC 1,5/3
Screw thread	M2
Tightening torque, min	0.25 Nm
Stripping length	7 mm
Conductor cross section stranded max.	1.5 mm ²
Conductor cross section solid max.	1.5 mm ²
Conductor cross section AWG/kcmil min.	28
Conductor cross section AWG/kcmil max	16
Maximum operating voltage $U_{max. AC}$	250 V AC

Max. operating current I_{max}	1.5 A AC (at 250 V)
	1.5 A DC (at 30 V)

Environmental conditions

Standards/regulations	IEC 61643-1
	DIN EN 61643-11
	IEC 60364-7-712

Drawings

Circuit diagram

